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Cambridgeshire County Council.

# ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE

Administrative County of Cambridge

*For the Year 1920.*

Cambridge :

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# INDEX.

	Page
Bacteriological Diagnosis ... ..	13, 22
Birth Rate ... ..	32
Blind Persons Act ... ..	31
Cancer ... ..	41
Cerebro-Spinal Fever ... ..	38
Child Welfare, Maternity and ... ..	14
Death Rate ... ..	34
Diarrhoeal Diseases ... ..	37
Diphtheria ... ..	36
Drainage, Sewerage, and Refuse Disposal ... ..	7
Encephalitis Lethargica ... ..	39
Enteric Fever ... ..	37
Erysipelas ... ..	37
Food and Drugs Acts, Sale of ... ..	10
Food Supplies, Control of ... ..	9
General Characteristics ... ..	1
Housing of the Working Classes ... ..	1
Illegitimacy ... ..	33
Infantile Mortality ... ..	34
Infectious Disease ... ..	35
Influenza ... ..	41
Isolation Hospitals ... ..	13, 36, 37
Malaria ... ..	39
Measles ... ..	38
Mental Deficiency Act, 1913 ... ..	29
Midwives Acts ... ..	18
Milk ... ..	10, 11, 12, 15, 17
Notification of Births Acts ... ..	15, 16
Nuisances ... ..	8
Ophthalmia Neonatorum ... ..	39
Pneumonia ... ..	40
Poliomyelitis, Acute ... ..	38
Population ... ..	32
Puerperal Fever ... ..	37
Scarlet Fever ... ..	36
Schools ... ..	12
Small-pox... ..	14, 35
Stillbirths ... ..	34
Tuberculosis, Methods of Control ... ..	23
„ Statistics ... ..	39
Vaccination ... ..	35
Veneral Diseases ... ..	20
Vital Statistics ... ..	31
Water Supply ... ..	4
Whooping Cough... ..	38

## GENERAL CHARACTERISTICS.

The total area of the Administrative County, exclusive of water, is 314,520 acres. There is only one Urban District within its borders, the Borough of Cambridge, which, in addition to being the seat of the University, is the market town for the County. Outside Cambridge, the County comprises 131 rural parishes, whose main industry is agriculture. Apart from a large jam factory, and such industries as cement making, brick making and brewing, there is little in the way of manufacture.

A considerable part of the County area, that to the South and East, is on the Chalk formations; to the West and North West are Gault and Jurassic Clays, while to the North are the fenlands. The Chalk, and the Lower Greensand which underlies the Gault Clay, are valuable sources of water supply.

## HOUSING OF THE WORKING CLASSES.

From the annual reports for the respective sanitary districts, the general housing conditions and progress of building schemes to the end of 1920 may be summarised as follows:—

*Cambridge Borough.*—It was estimated in 1919 that 450 to 500 houses were wanted at once, and 100 yearly afterwards. As an instalment of the Town Council's building scheme designed to meet the deficiency 20 houses had been completed at the end of 1920, 92 were in course of erection, and tenders had been received for 20 houses at Chesterton. The conversion of the First Eastern General Hospital into temporary housing accommodation was completed, and provided 214 tenements, which were principally occupied by young newly married people.

*Chesterton Rural.*—The District Council estimated its requirements in 1919 at 292 new houses ; their building scheme was for 181 houses, and sites were selected for 177 in 28 parishes. At the end of 1920, 10 houses were completed, 66 were in course of erection, and sites for 68 others had been approved.

In this sanitary district four of the cases of overcrowding were abated by the provision of railway carriages as temporary dwellings.

*Caxton and Arrington Rural.*—The estimate for this District was 150 houses. By the end of 1920 eight had been erected in three parishes.

In this District a scheme was sanctioned by the Ministry under which the County Council were to erect 50 houses at Papworth Everard under powers transferred from the Rural District Council by agreement, for occupation by patients who have undergone treatment and training at the Cambridgeshire Tuberculosis Colony. During the year a contract was entered into for the erection of a first instalment of 12 houses by the Colony under the supervision of the County Architect. These were in course of erection at the end of the year, and 6 more were under consideration.

*Linton Rural.*—The estimated deficiency was 166 houses. During the year the District Council built 10 cottages at Sawston, and 14 were in course of erection in two other parishes.

*Melbourn Rural.*—The estimated deficiency was 198 houses, or 165 if those anticipated to be needed to meet the development of new industries be excluded. A good start has been made, as 56 houses were in course of erection in 7 parishes, and 12 more were shortly to be erected. It is particularly satisfactory that 30 houses were being built in Melbourn and Meldreth, as the bedroom accommodation in houses in these parishes is very much below reasonable requirements.

*Newmarket Rural.*—The estimated shortage for this District was 240 houses. At the end of the year 32 houses were erected, or in course of erection, in three parishes, and a start was made in January last on 20 additional houses. In addition 25 were being built by private enterprise in 6 parishes.

*Swavesey Rural.*—The estimate of houses required was 53. A start had been made by the District Council during the year, but figures are not to hand.

**Unfit Dwelling Houses.**—As the Ministry's table has not been furnished for all the Districts a comprehensive statistical statement cannot be set out here. Particulars of the principal items are as follows:—

*Houses Inspected Under Housing Acts and Regulations.*—Cambridge 1,129, Chesterton R.D. 3,828, Caxton R.D. 350, Linton R.D. 632, Newmarket R.D. 759, Melbourn 71. Inspection was not carried out in Swavesey Rural District.

*Houses Unfit for Habitation.*—Cambridge 7, Chesterton 81, Caxton 2, Linton 11, Newmarket 3, Swavesey 6.

*Houses not in all respects reasonably fit.*—Cambridge 619, Caxton 20, Linton 76, Newmarket 92. The wide variation in these figures, after allowing for population, will be noted; obviously there can be no uniform standard.

*Houses rendered fit by informal action.*—Cambridge 540, Chesterton 55 (?), Caxton 70, Linton 39, Newmarket 64.

The figures relating to statutory action are small and not in all respects complete. Repairing notices under the Housing, Town Planning Act, 1919, were served on the owners of 521 houses, and 29 houses were in consequence rendered fit. Notices requiring the remedy of defects under the Public Health Acts were served in respect of 104 houses, the defects being remedied in 73 instances.

Under the Housing, Town Planning Act of 1909, representations were made regarding 36 houses with a view to making closing orders, 9 closing orders were made, and 3 were determined as the houses had been made fit. No demolitions are recorded, as might be expected.

From the foregoing figures one concludes that there was considerable activity as regards inspection, approximately 6,800 inspections having been made, that close on 800 houses were rendered fit by informal action, and that legal action taken was very limited.

*Housing of County Council's Employees.*—In last year's report it was stated that the Standing Joint Committee had resolved to erect 41 houses for the Police within five years, and that the Roads and Bridges Committee were enquiring into the question of housing of 65 roadmen. Owing to the financial situation no further progress has been made. For the same reason the Education Committee have for the present abandoned their scheme for providing 23 houses for Head Teachers within three years, and are limiting their proposals to the provision of one house per annum during the next five years.

## WATER SUPPLY.

*Cambridge Borough* is supplied by the Cambridge University and Town Waterworks Company, who have now commenced pumping water from the Chalk at their newly constructed works at Fleam Dyke.

*Chesterton Rural.*—Of the 37 parishes, 28 have a public water supply. Eight parishes round Cambridge are supplied by the Cambridge University and Town Waterworks Company. Mains have also been extended to the parish of Great Wilbraham, as required by the Company's Act.

Private companies supply water by main to (a) Cottenham and Rampton from the Lower Greensand, and (b) Willingham



from a gravel deposit ; Madingley has a supply from the Lower Greensand piped to stand-pipes, and Longstanton All Saints' has a piped supply from a gravel well to public pumps. Sixteen other parishes have public wells supplied chiefly from the Lower Greensand, but partly also from the chalk and gravel, while 9 parishes depend upon private sources.

During 1920, water from public wells at Haslingfield, Stapleford, Comberton, and Harlton was found not to be of satisfactory purity, and the steps taken for remedy are recorded. At Little Shelford a public tubed well was found to admit sewage, and the necessary steps were taken with satisfactory results. The failure of a supply from the Lower Greensand at Harston is under consideration. At Great Wilbraham stand-pipes are being fixed in accordance with the provisions of the Company's Act of 1910.

*Caxton Rural.*—The East Hunts. Water Company supply a constant service to five parishes in this District from a well sunk into the Lower Greensand near Bourn. Eleven other parishes have public wells, some in clay. Water from ponds is drunk in four parishes. Difficulty arises in this District from the thickness of the Jurassic Clays, and the limited supply available from the Boulder Clay.

The mains having been extended to Papworth Everard for the supply of the Tuberculosis Colony, the water is available for the use of the parish, the existing well supply being contaminated by surface pollution. The water at Hardwick, which is filtered from a pond and was unfit for drinking, is stated to have been rendered fit for drinking purposes.

*Linton Rural.*—There is no public piped service and no supply by private company. Fourteen of the 20 parishes have public wells, the water being mainly derived from the Chalk at a considerable depth, in some cases after boring through Boulder Clay. In two parishes filtered pond water

is publicly supplied, and in five others pond water is drunk in addition to the provision made by the public wells. Five parishes rely upon private wells.

*Melbourn Rural*.—There is no public mained service. The District is fortunate in being able to obtain a pure supply in many parishes from the Lower Greensand, which is protected by the overlying Gault Clay, ten parishes being supplied in this manner. There is much waste of water by overflow from this valuable stratum. Four parishes are supplied by deep wells. One of the parishes which has a deep Chalk supply—Great Chishall—has also a public supply of filtered pond water, which has been liable to vegetable organic pollution.

*Newmarket Rural*.—The Chalk is the chief source of supply, and on the high ground can only be reached through the Boulder Clay. There are three public piped supplies derived from the Chalk—(1) for Cheveley and Wood Ditton (proposed extension to Kirtling and Ashley), (2) for Stetchworth (proposed extension to Dullingham), and (3) from the Newmarket Waterworks to a few houses in Wood Ditton and Cheveley parishes. Preliminary works near Fordham for the supply of Soham from the Chalk were carried out, but their completion has been deferred; this scheme may eventually include Fordham.

Of other parishes than those above mentioned, four have public wells bored into the Lower Greensand, and in one a similar well at Lode, belonging to the County Council, is available for public use. Two parishes have wells in the Boulder Clay, and the remaining parishes derive their supply from wells in the Chalk at various depths, most of them provided by the District Council.

*Swavesey Rural*.—The East Hunts. Water Company supply Swavesey and some houses in Conington and Fen Drayton from their well in the Lower Greensand. Lolworth



is supplied from a private well in this stratum. The remainder of the supply is from surface wells in gravel.

## DRAINAGE, SEWERAGE, AND REFUSE DISPOSAL.

No new work of importance is recorded as having been carried out in any of the sanitary districts during the year.

*Closest Accommodation.*—Cambridge Borough is on the water carriage system; in the rural area this method of disposal is only found in connection with the larger houses, the closets draining to cesspools. Privies or pail-closets are provided for the smaller class of property, and, speaking generally, the old insanitary privies are being replaced by pails, but progress in this direction is not uniformly rapid in the different Rural Districts. In Chesterton R.D. 77 per cent. of the houses have pail closets, 10 per cent. water closets, and 12 per cent. privy pits, in Linton R.D. about 40 per cent. of the houses have privy closets and 46 per cent. have pail-closets, and in Newmarket R.D. privies greatly preponderate. It should be practicable for the Local Authorities which have been least progressive in this respect to speed up the process of conversion to the pail system, as has been done in other Districts.

*Sewerage and Drainage.*—In Cambridge Borough sewage is removed on the partially separate system to the sewage farm in the Chesterton Rural District, where, after sedimentation and land filtration, the effluent is discharged into the Cam.

From what has been said as to closet accommodation in the rural districts it will be gathered that there is little provision in the way of sewers in the villages. Exceptions may be quoted, as at Sawston in the Linton Rural District,

and Stetchworth in the Newmarket Rural District, where there are small sewage disposal works. In the larger villages the storm-water drains are utilised as sewers for slop waters. Elsewhere excreta are disposed of on gardens and allotments.

In the Chesterton Rural District the effluent from the sewage disposal works at the factory at Histon is said to be again causing pollution of the water-course through the village ; the owners are seeking expert advice.

*House Refuse.*—In Cambridge Borough there is a system of public scavenging, the refuse being disposed of in the destructor adjoining the sewage pumping station.

In the rural area refuse is disposed of on garden ground or on allotments. While this may meet the case in the smaller villages, it is unsatisfactory in the more populous villages, where waste matter is accumulated on a limited space near the dwellings, some of which are situated in confined areas. This matter has been under consideration in connection with the parishes of Waterbeach and Cottenham in the Chesterton R.D., and schemes of cleansing prepared by the Sanitary Inspector have been submitted to the Parish Councils. Dr. Armistead again notes that a system of scavenging is needed at Sawston, in the Linton Rural District.

## NUISANCES.

As a detailed statement of the work of the Sanitary Inspectors is not given in all the annual reports, no comprehensive statement can be made here. It would be advantageous if a uniform tabular statement were in use, showing in concise form the work done by the Sanitary Inspectors for the safeguarding of the health of the public, and the preservation of the amenities of their daily life. Some suggestion of the volume of this work will be gathered from the following totals :—

			<i>Informal</i>	<i>Statutory</i>
		<i>Inspections.</i>	<i>Notices.</i>	<i>Notices.</i>
Cambridge ...	...	3825	270	29
Chesterton R.D.	...	2802	329	49
Linton R.D....	...	1095	81	27
Swavesey R.D.	...	433	24	10
Melbourn R.D.	...	615	?	?
Newmarket R.D.	...	1248	92	22
Caxton R.D.	...	400	“ Orders for Sanitary amendment ” 60	

## CONTROL OF FOOD SUPPLIES.

*Cambridge.*—Dr. Laird reports that 2,728 inspections were made of the 25 slaughter houses (13 registered, 12 licensed), 10 defects detected being remedied. Dr. Laird remarks upon the efficiency of the inspection in view of the fact that all the slaughtering is done on private premises. “ The butchers themselves largely contribute to this through their Association. An insurance fund has been in existence now since 1910, and all members of the Association undertake to notify any suspected meat to the Medical Officer of Health.”

The amount of meat condemned in 1920 exceeded 205 cwts. Other foods condemned, including fish, rabbits, fruit and vegetables, syrup, etc., exceeded 35 cwt. ; 118 tins of various tinned foods were also condemned.

Meat control ceased at the end of June, and it is a remarkable fact that the amount of meat condemned during the first half of the year was nine times greater than in the second half. Dr. Laird speculates as to where the meat which would have been inspected and condemned is now going.

The Cambridge report also contains statistics which show that 299 visits were paid to 68 registered bakehouses, 184 visits to the premises of 23 cowkeepers, and 152 visits

to the dairies and milkshops of 59 purveyors on the register. Information is given regarding the remedy of defects found.

*Rural Area.*—The reports on the Rural Districts indicate that premises concerned in the supply of food were duly inspected during the year, though precise figures are not given in all cases. Slaughterhouses are reported to have been duly inspected in all the districts; no special action is recorded. One new slaughterhouse is being built in Chesterton Rural District.

Dr. Coombes states that in the Chesterton Rural District less slaughtering has been carried on recently owing to the increased proportion of frozen meat. Over 30 per cent. of the population purchase their meat outside the district.

Unsound food recorded to have been seized and condemned in the Rural Districts was as follows:—Chesterton, 453 tins of meat condemned; Newmarket, 28 tins of food stuffs condemned; Linton 12 lbs. of beef condemned; and Swavesey, part of a tubercular carcase condemned. No seizures are recorded for the other rural districts. Bakehouses and premises for the production and sale of milk were inspected in all districts, the general tone of the reports being that these premises are “fairly satisfactory.” The cows are in the open for the greater part of the year. In Chesterton Rural District, one-third of the bakehouses are said to be of good modern construction, half fair, and one-sixth old and somewhat unsatisfactory. No underground bakehouses are recorded in the Rural Districts.

## SALE OF FOOD AND DRUGS ACTS.

*Rural Area.*—In this area the Acts continue to be administered by the County Police. The total number of samples taken and reported upon by the Public Analyst was 135 (127 in 1919), of which 83 were taken formally and 52 informally. The samples taken were:—Milk 105, margarine 12, lard 6, butter 9, dripping 2, and coffee 1.

Of the 135 samples analysed, 12, or 8.9 per cent., proved not to be genuine, compared with 6.3 per cent. in 1919, 11.4 in 1918, 3.4 in 1917, 5.2 in 1916, 1.2 in 1915, and 5.1 per cent. in 1914. Of the 105 milk samples, 52 were taken informally, and of these 6 proved not to be genuine, 5 showing deficiency of milk fat to the extent of 3, 6, 6, 10, and 28 per cent. respectively, and one showing evidence of 20 per cent. of added water.

Six of the 53 formal samples of fresh milk proved not to be genuine, the action taken being as follows :—

1. Contained 6 per cent. added water. Proceedings dismissed, as vendor pleaded that the milk was as it came from the cow.

2. Contained 14 per cent. added water. A previous informal sample contained 20 per cent. added water. Fined £5.

3. Deficient 26 per cent. in fat. Proceedings dismissed on the plea that the milk was as it came from the cow.

- 4 and 5. Deficiency of 5 and 10 per cent. of milk fat respectively. No proceedings—milk as from cow.

6. Deficiency of 14 per cent. of fat. Proceedings dismissed—milk not stirred before serving.

*Cambridge Borough.*—Samples taken for analysis numbered 147 (128 in 1919), including 6 informal samples of milk. The principal items were milk 83, butter 16, oatmeal 6, coffee 12, ground ginger 6, and white pepper 9. Of the 15 other articles sampled, the number of samples in no case exceeded four.

The percentage of non-genuine samples—10 in number (all milk)—was 6.8, compared with 2.3 in 1919, 6.4 in 1918, 9.7 in 1916 and 1917, 8.4 in 1915, 7.8 in 1914, and 22.5 in 1913.



One sample of milk was found on analysis to contain 18 per cent. of added water ; the vendor was fined £10 10s., including costs. Nine samples were deficient in milk fat. One sample, 15 per cent. deficient, was informal, and no legal action was taken regarding another sample with a deficiency of 16 per cent. of fat, a check sample being taken. The vendor of a third sample, 3 per cent. deficient, was cautioned. The remaining six samples showed deficiency in milk fat of 13, 14, 8, 12, 7 and 9 per cent. of fat respectively ; all were taken in course of delivery at a railway station, and on legal proceedings being taken all six cases were dismissed.

*Use of Preservatives.*—In both urban and rural areas the Public Analyst examines for preservatives all samples taken under the Sale of Food and Drugs Acts which are likely to contain them. In the rural area boric acid was found to the extent of 0.40 and 0.45 per cent. in three samples of butter, and in quantities varying from 0.35 to 0.50 per cent. in 12 samples of margarine.

In Cambridge Borough no preservative was found in 83 samples of milk. There was no offence under the Public Health (Milk and Cream) Regulations, 1912.

## SCHOOLS.

The work of the School Medical Service is dealt with fully in the Annual Report to the Education Committee.

As regards infectious disease the principal feature of the year was the continued prevalence of measles affecting about half of the rural area ; whooping cough was also prevalent, though to a less extent. These necessitated much home visitation by the nursing staff for enquiry and advice ; the total number of home visits paid in connection with infectious and contagious disease was 1,615.

The School Medical Staff paid 40 special visits to schools in the rural area for enquiry into infectious and contagious disease, and the School Medical Officer certified for the closure of 109 schools, more than half of the closures being for measles. For bacteriological diagnosis of diphtheria 306 swabs were taken, 9 of which showed evidence of diphtheria.

The report of the County Education Committee contains notes on the hygienic condition of school premises, on which also 15 special reports were furnished during the year by the School Medical Officer regarding 15 schools, 8 Provided and 7 Non-provided.

## ISOLATION HOSPITALS.

The existing provision is as follows :—

*Cambridge Borough.*—A permanent brick structure, recently extended, and now providing accommodation for 62 patients. Accommodation is adequate on a population basis, and cases from other Sanitary Districts are admitted on payment.

*Newmarket Rural.*—A joint hospital of permanent structure shared with Moulton Rural District (West Suffolk). There is some deficiency in the accommodation on air space ; plans were prepared for extension, but war conditions stood in the way.

*Melbourn Rural.*—A joint hospital of permanent structure, shared with the Ashwell Rural District (Herts). Only one disease can be admitted at a time, and the accommodation is insufficient on a population basis.

*Chesterton Rural.*—A permanent administration block, with a single temporary ward pavilion ; accommodation is inadequate, and only one disease can be dealt with at a time.

The Caxton and Swavesey Rural Districts have no isolation hospitals, but send their cases to the Cambridge Isolation Hospital. The Linton Rural District have no hospital, and only exceptionally remove any case to an isolation hospital.

The decided deficiency in accommodation for the rural area of the County as a whole has been the subject of frequent reference in these reports, and the conference held in 1920 between the Public Health Committee and the Local Sanitary Authorities for discussion of the methods by which the deficiency could be remedied was noted in my last Annual Report. The Public Health Committee subsequently furnished to the Finance Committee an estimate of the capital required for the provision of 24 additional beds, but owing to the financial situation the matter has not been proceeded with.

The isolation hospitals were inspected during the year, and the annual grants were approved for payment by the County Council in respect of the hospitals provided by the Cambridge Town Council and by the Newmarket and Melbourn Rural District Councils. The total grants amounted to £809 os. 8d.

There is no change in the position as regards the isolation of small-pox. Chesterton Rural District Council is the only Local Authority which has not entered into an agreement with the Cambridge Town Council for the admission of cases to the Cambridge Small-pox Hospital, a temporary structure on the outskirts of the town.

## MATERNITY AND CHILD WELFARE.

Two schemes are in operation, one administered by the Town Council for Cambridge Borough, and the other by the County Council for the whole of the rural area of the County.

*Cambridge Borough.*—Under the Notification of Births Act, 1907, there were notified 1,219 births, or 93.6 per cent. of the total births registered, against 97.9 per cent. in 1919.

In January, 1919, the two Health Visitors employed by the Association for Maternity and Child Welfare were taken over by the Town Council. The following is a record of their home visits in 1920 :—

First visits to Infants	...	...	...	980
Subsequent visits to Infants	...	...	...	2067
Visits to children 1—5 years	...	...	...	321
First visits to Expectant Mothers	...	...	...	57
Subsequent visits to Expectant Mothers	...	...	...	25
Other Cases	...	...	...	82
Total				3532

The four Consultation Centres are provided and managed by the Cambridge Association for Maternity and Child Welfare, the medical and health visiting staff being provided by the Corporation. During the year 4,696 attendances were paid by 598 infants, and 1,094 attendances by 223 children aged one to five years. Twenty visits were also paid by 11 expectant mothers, but the work in this respect has been disappointing. In addition to other functions, the Consultation Centres distributed dried milk, etc., during the year, at prices varying with the financial position of the recipients, the total sum expended by the Town Council on milk being £158.

Arrangements have now been made for an ante-natal clinic at Addenbrooke's Hospital, and for the provision of hospital beds when required. A clinic for the dental treatment of expectant and nursing mothers and children under 5 was opened by the Town Council early in 1921.

*Rural Districts.*—During the year 1,427 notifications were received under the Notification of Births Acts, the number of births registered as having occurred within the same period being 1,498. After deducting 36 duplicates and 43 stillbirths, the number of live births notified was 1,348, or 90.0 per cent. of the total registered, compared with 97.5 per cent. in 1919 and 90 per cent. in 1918.

The proportion of notifications by medical practitioners (856) slightly decreased to 60.0 per cent. from 60.6 per cent. in 1919, notifications by midwives (441) remaining steady at 30.9 per cent., and those by relatives (130) increasing slightly to about 9.0 per cent. In addition, the Health Visitors and Workhouse Masters reported 53 infants for visitation purposes. The interchange of complete monthly lists of registered and notified births with the Registrars continues.

Home visitation by the staffs of the County and District Nursing Associations was continued for advice with regard to expectant mothers, infants and young children up to school age. During the year first visits were paid to 442 expectant mothers, against 299 in 1919, and to 1,446 infants, against 972 in 1919. The average number of visits paid to each expectant mothers was 4.1, against 4.5 in 1919, and 7.0 to each infant, against 8.1 in 1919. Total visits paid were as follows :—

	<i>Expectant Mothers.</i>	<i>Up to Infants. School Age.</i>	<i>Total.</i>
County Health Visitors	309	5246	6625
District Nurses ...	1527	4956	5241
Total for 1920	1836	10202	11866
„ „ 1919	1334	7886	11270
			23904
			20490

These figures again indicate a very substantial increase of over 16 per cent. in home visitation over the record for 1919, a very satisfactory feature, when it is borne in mind



that in a scattered rural area home visitation has largely to be relied upon for instruction and advice. The main increase was in visits to mothers and infants, and as the birth rate was phenomenal, these figures may fall in 1921. It is, however, satisfactory to note that the proportion of expectant mothers visited increased from 26 per cent. in 1919 to 30 per cent. in 1920.

Under regulations issued in 1918 by the Local Government Board and by the Food Controller, the supply of fresh milk was authorised to expectant and nursing mothers, infants or children under five years in 41 families, and of dried milk to 25 families, 66 families in all. In addition to these fresh applicants 56 families remaining on the register from 1919 were supplied, the total number of families thus assisted being 122. During the same period the supply of milk to 36 families was discontinued. All cases were the subject of careful enquiry before a certificate for the supply of milk was issued, and a portion of the cost was contributed by the parents, where this could reasonably be required.

During the year some 60 mothers and children were the subject of special enquiry with a view to institutional treatment if found necessary. Seven mothers were maintained by the Council in Addenbrooke's Hospital during confinement, either for difficulty of confinement or unsuitability of the home conditions; one child also was maintained as an in-patient. In addition hospital letters were given for mothers and children. Approximately 30 mothers were referred to the Surgical Aid Association as desiring dental treatment.

There are no maternity and child welfare centres in the rural area organised by the County Council, but the formation of voluntary centres is encouraged by annual grants in aid where necessary. There are now four such centres working in the larger villages of Sawston, Linton, Great

Shelford, and Cottenham, and grants are made to the three last named.

During the year the Ely Diocesan Association opened a Maternity Home of 12 beds in Cambridge for fatherless children with their mothers. With the approval of the Ministry of Health the County Council have made a capital grant of £500 to this institution, on condition that two places are reserved for cases sent by the Council.

Three home helps have been provided by the County Nursing Association, and are now at work assisting in domestic duties during confinements.

## MIDWIVES ACT.

To facilitate the working of the Maternity and Child Welfare scheme of the Borough of Cambridge certain powers and duties under the Midwives Act are delegated to the Town Council. The services of the County Council's Inspector of Midwives are utilised for inspection purposes.

During the year 153 routine visits of inspection were paid to midwives by the Inspector, 23 in Cambridge Borough and 130 in the rural area. Special enquiries were also made from time to time as occasion arose, the number of such enquiries being approximately 36. One enquiry was made into alleged unregistered practice, but the woman proved to be acting as a maternity nurse under medical supervision.

Two midwives were cautioned during the year for failure to send for medical aid, but occasion did not arise to report any midwife to the Central Midwives Board.

The following is the number of women who notified their intention to practise in the years specified :—

		<i>Trained.</i>	<i>Untrained.</i>	<i>Total.</i>
January, 1906 ...	...	24	42	66
„ 1920 ...	...	45	6	51
„ 1921 ...	...	41	4	45

Of the 45 midwives who notified in January, 1921, 8 reside in Cambridge (all trained) and 37 (33 trained, 4 untrained) live in the rural area. Including notifications received after January, there were 61 women (55 trained, 6 untrained) practising in the Administrative County during 1920. Some of these notifications were due to holiday duty undertaken for District Nurses. Since 1906, when the administration of the Act commenced, the number of trained midwives notifying has almost doubled, owing to the formation of District Nursing Associations, encouraged by financial assistance from the County Council, through the agency of the County Nursing Association.

This assistance is given in two forms—grants for training of midwives, and annual grants in aid of new District Nursing Associations, who employ a Nurse-midwife. The training grants are made through the Midwives Act Committee under the provisions of the Midwives Act, 1918. In each case an undertaking must be given that the candidate will practise in the County as a midwife or maternity nurse for not less than three years.

During the year two new District Nursing Associations were formed through the instrumentality of the County Nursing Association, and grants were made to both in aid of the Nurse-midwives employed by them. Other Associations were being organised to start work in 1921.

Under the scheme of grants made direct by the Ministry of Health to District Nursing Associations for midwifery and maternity nursing services, the County Nursing Association distributed a Treasury Grant for services rendered during the year ended March 31st, 1921.

Apart from intention to practise and change of address, notifications received from midwives numbered 217, against 128 in 1919, 136 in 1918, and 114 in 1917. They comprised

medical help for mother 140, for infant 32, still-birth 11, laying out the dead 7, liability to be a source of infection 9, and artificial feeding 15. From investigation of notifications of rise of temperature during the puerperium it transpired that certified midwives were concerned with four septic cases, but there was no infringement of the rules of the Central Midwives Board in their conduct of these confinements. The cases of inflamed eyes in the newly born enquired into proved slight.

Of the 172 midwifery cases to which a doctor was summoned by a midwife under circumstances of difficulty in the year 1920, the payment of the fee by the County Council was claimed by the doctor in 120 cases, under the provisions of the Midwives Act, 1918. In a considerable number of these cases part of the fee was recovered from the patient, and the Surgical Aid Association rendered valuable assistance in collection of these payments in Cambridge Borough.

## VENEREAL DISEASES.

The County Council's scheme for the diagnosis and treatment of venereal diseases has been in operation since January, 1917.

*Treatment Centre.*—Details of the treatment centre at Addenbrooke's Hospital have been given in previous annual reports, and these arrangements were continued during 1920. Any person is entitled to receive treatment free of charge, and can obtain particulars as to hours of attendance by application to the County or District Medical Officers of Health. Clinics are held twice weekly for both sexes, but at separate hours.

The work done at the treatment centre during 1920 is summarised in the following tables :—

TABLE I.

	<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Under treatment on			
January 1st, 1920 ...	81	53	134
New patients during 1920	193	124	317
Total under treatment ...	274	177	451
Venereal Disease ...	178	99	277
Not Venereal Disease	15	25	40
Left without completing			
treatment ... ..	77	40	117
Completed treatment, but			
not final tests ...	13	5	18
Completed treatment and			
tests ... ..	67	46	113
Transferred to other			
Treatment Centres ...	4	3	7
Under treatment at end			
of year ... ..	93	58	151
Total out-patient			
attendances ... ..	1804	1120	2924
Aggregate "in-patient			
days" ... ..	444	1230	1674

TABLE II.

	<i>Cambs.</i>	<i>Other Counties.</i>	<i>Total 1920.</i>	<i>Total 1919.</i>
New out-patients				
during 1920 ...	205	112	317	278
Total out-patient				
attendances ...	1768	1156	2924	1887
Aggregate in-patient				
days ... ..	1119	555	1674	1773
Doses of salvarsan				
substitutes ...	507	616	1123	738

The total work done at the Centre, including patients from other Counties, again showed a marked increase on that



recorded for the previous year. While the new out-patients increased by 14 per cent., the total out-patient attendances increased by as much as 55 per cent. compared with the year 1919. A large increase is also recorded in the work relating to patients from this County, as is shown by the following figures :—

#### CAMBRIDGESHIRE PATIENTS.

	1919.	1920.	<i>Increase per cent.</i>
New out-patients ...	164	205	25
Total out-patient attendances ...	1167	1768	51
Aggregate in-patient days ... ..	892	1119	25

These figures indicate not only that a larger number of people are resorting to the centre for treatment, but, what is of much importance, that a larger number of attendances is being paid on the average by each patient.

*Laboratory Diagnosis.*—Under the Council's scheme specimens are examined free of charge to medical practitioners and their patients at the University Laboratories. During the year 489 specimens were tested by the Wassermann reaction for syphilis, and 350 were submitted for bacteriological examination. These figures include specimens sent from the treatment centre.

*Propaganda.*—The County Council have now for four years undertaken propaganda work through the agency of the Cambridgeshire Branch of the National Council, to which body they make an annual grant.

Two educational programmes were carried out during the year by representatives of the National Council. Major Nelson addressed meetings for men in 14 rural parishes, and secured exhibitions of the film "The End of the Road" in three. He also addressed students at various Colleges in

Cambridge. Mrs. Altentop held meetings for mothers in some 13 rural parishes and at about 8 schools in Cambridge. A large number of leaflets were distributed.

Fifteen public exhibitions of the film " Damaged Goods " were given in the Guildhall, Cambridge, to large audiences. The Branch are impressed with the educational value of these exhibitions, which are distinguished from the ordinary cinema film by being given in a special building and under the auspices of the Branch of the National Council, which controls all advertisements and gives away literature. On this point the annual report of the Branch states :—" All the helpers concerned in these exhibitions are impressed by the seriousness with which they are regarded by the audiences, the eagerness shown for the leaflets, and especially by the entirely satisfactory conduct and demeanour of all present."

## METHODS OF CONTROL OF TUBERCULOSIS.

At the end of the year Dr. Varrier Jones resigned his part-time appointment as Tuberculosis Officer. He was succeeded in 1921 by the Assistant Tuberculosis Officer, Dr. W. Paton Philip, as whole-time Tuberculosis Officer.

The County Council continued to provide supervision in the homes, dispensary treatment and sanatorium accommodation for tubercular persons, whether insured or uninsured, and including ex-Service men. The payment by the Insurance Committee to the Council of certain sums in respect of the insured section of the community continued in 1920, but under the provisions of the National Insurance Act, 1919, the Insurance Committee have since May 1st, 1921, ceased to be concerned with the provision of institutional services as indicated above.

*Dispensary and Homes.*—The following figures indicate the volume of work undertaken at or in connection with the Tuberculosis Dispensary (1, Camden Place, Regent Street, Cambridge), including periodic visitation in the homes of the patients for supervision and advice. The staff are not responsible for medical treatment in the homes. The Dispensary at Cambridge serves the whole County area.

1. Cases examined or treated at or in connection with the Dispensary were as follows :—

				1919.	1920.
New cases	...	...	...	519	495
Old	„	...	...	446	718
				<hr/>	<hr/>
				1065	1213
				<hr/>	<hr/>

2. Visits of Patients to Dispensary :—

				1919.	1920.
Insured Persons	...	...	...	516	449
School Children	...	...	...	462	632
Other Uninsured Persons	...			314	188
				<hr/>	<hr/>
				1292	1269
				<hr/>	<hr/>

3. Visits to Homes :—

(a) *By Tuberculosis Officer* :—

			Borough.	Rural.	Total.
Insured	...	...	109	505	614
School Children	...		40	110	150
Other Uninsured	...		20	151	171
			<hr/>	<hr/>	<hr/>
Total	1920		169	766	935
	„	1919	125	704	829
			<hr/>	<hr/>	<hr/>

(b) *By Dispensary Nurses :—*

			<i>Borough.</i>	<i>Rural</i>	<i>Total.</i>
Insured ...	...	...	682	347	1029
Uninsured	...	...	582	453	1035
			<hr/>		
	Total	1920	1264	800	2064
	,,	1919	1273	826	2099
			<hr/>		

(c) *By General Nursing Staff :—*

Insured ...	...	...	—	518	518
Uninsured	...	...	—	502	502
			<hr/>		
	Total	1920	—	1020	1020
	,,	1919	—	673	673
			<hr/>		

## Grand total home visits :—

1920	...	...	1433	2586	4019
1919	...	...	1398	2203	3601

Specimens of sputum examined bacteriologically numbered 88 (115 in 1919), the tubercle bacillus being found in 19 specimens.

The Tuberculosis Dispensary is open daily ; patients are seen by the Tuberculosis Officer on two fixed days in the week and on other days by special appointment. The Tuberculosis Officer is in constant touch with medical practitioners for consultation regarding notified or doubtful cases, either at the Dispensary or in their homes.

The Tuberculosis Nurses visit the homes of notified cases, and among other objects endeavour to secure the attendance at the Dispensary of as many contacts as possible. Contacts are also examined by the Tuberculosis Officer in their homes, especially in the rural area. Any subsequent suspicious illness among the contacts is reported by the Tuberculosis Nurses.

In addition to the foregoing sources of information cases of tuberculosis or of suspected tuberculosis are also referred to the Tuberculosis Officer by the medical staffs of the Local Education Authorities, the Pensions Authorities, the Almoner of Addenbrooke's Hospital, the Surgical Aid Association, and similar bodies.

Any sanitary defects noted during the periodical visits paid to the homes of notified cases by the Tuberculosis Nurses are brought to the notice of the Medical Officers of Health to the Local Sanitary Authorities. Disinfection of shelters, bedding, etc., is carried out by the Local Sanitary Authority on request.

No arrangements have so far been made by the County Council for the provision of dental treatment, nursing and extra nourishment.

The Tuberculosis Officer is medical adviser to the Cambridgeshire After-Care Association, and general after-care is one of the normal functions of his office. The home conditions of patients are kept under supervision, advice and assistance are given in connection with employment, and application is made to various organisations for assistance as regards food, etc.

*Shelters.*—Twelve additional open-air shelters, with bedding outfits, were purchased, bringing the number acquired up to 111. These are reported upon from time to time by the Tuberculosis Nurses, and repairs are executed as required.

*Sanatorium Accommodation*—The provision made by the County Council is for both insured and uninsured persons, including children. Preferential accommodation is found for ex-Service men, but the whole cost is defrayed by the Treasury where the disease is attributable to or aggravated by military service, or in the case of men invalided from the Service for tuberculosis.



The following table shows that in addition to 37 ex-Service men, 52 insured persons (27 men and 25 women), 25 uninsured adults (8 men, 17 women) and 75 children were admitted to Sanatoria during the year.

		<i>In Sanat.</i>		<i>Admitted.</i>	<i>Discharged.</i>	<i>Total</i>
		<i>Jan. 1st.</i>				<i>Treated.</i>
Men :						
Ex-Service	...	28	37	36	65	
Insured Civilians		23	27	25	50	
Uninsured	„	4	8	10	12	
Women :						
Insured	...	11	25	25	36	
Uninsured	...	4	17	14	21	
Children	...	21	75	59	96	
Total 1920		91	189	169†	280	
„ 1919		41	176	128*	217	

\* Includes 2 deaths.

† „ 6 „

Including patients in institutions at the beginning of the year, the total number under sanatorium treatment in 1920 was 280, against 217 in 1919.

The County Council obtain almost all the accommodation for their male adult patients, in all stages of pulmonary tuberculosis, at the Cambridgeshire Tuberculosis Colony, Papworth Everard. Cases of tubercular disease of the bones are also admitted. This institution does not belong to the County Council, but the Council have representation on the Committee of Management.

The institutions to which patients were sent in 1920 were as follows :—

	<i>Male</i>				
	<i>Ex-Service.</i>	<i>Civilians.</i>	<i>Women.</i>	<i>Children.</i>	<i>Total.</i>
Cambs. T. Colony	35	31	—	—	66
Bramblewood ...	—	—	22	6	28
Holt (Children's)	—	—	—	14	14
Maltings Farm	—	—	9	—	9
Hunstanton ...	—	—	—	14	14
Ipswich ...	1	—	7	9	17
Addenbrooke's					
Hospital ...	—	1	1	—	2
Alexandra Hospital	—	—	—	1	1
Treloar's, Alton	—	—	—	5	5
Oak Bank ...	—	—	—	24	24
Lowestoft ...	—	—	1	—	1
Margate ...	—	—	4	2	6
Park Hospital ...	1	—	—	—	1
Rudgwick ...	—	1	—	—	1
	37	33	44	75	189

Apart from Addenbrooke's Hospital, where cases requiring surgical interference are admitted, vacancies for women and children have been obtained outside the County, as will be seen from the above table. The total provision for civilians of both sexes was increased towards the end of the year from 70 to 100 beds, ex-Service men being also accommodated without limitation as to numbers. Even with this extended provision the needs of the County are not adequately met. The Public Health Committee felt that the provision of a sanatorium for women and children within the County area was required, and an estimate for a sanatorium of 50 beds was prepared, but the Council were advised by the Finance Committee that they were not prepared to find the necessary capital under present financial conditions.

The number of beds actually reserved was increased in 1920 to 79, made up as follows:—Papworth Colony 30, Bramblewood 14, Oak Bank 15, Holt Sanatorium for Children 12, Ipswich 5, and Maltings Farm 3. The special difficulty is in providing accommodation for advanced pulmonary cases in women and children, and for bone cases.

## MENTAL DEFICIENCY ACT.

During the year 44 new cases were considered by the Committee for the Care of the Mentally Defective. Of these, 18 were notified as “neglected” (13 by the Cambridgeshire Voluntary Association and 5 from other sources), 18 by Local Education Authorities (Cambridge 6, County 12), 6 Poor Law Cases by the Board of Control, and 2 by the Borough Police as charged with an offence. Of the Local Education Authorities’ cases, 16 were notified as “ineducable” (Borough 6, County 10), and 2 (County) about to leave a special school at the age of 16.

The foregoing cases were dealt with as follows:—

Certified Institution on petition	...	...	20
“ “ under Order of Court	...	...	1
State Institution on petition	...	...	1
Supervision by Voluntary Association	...	...	14
Order for Petition not executed	...	...	1
Responsibility not accepted	...	...	4
Insufficient evidence of defect	...	...	1
Referred to Relieving Officer	...	...	1
Considered not subject to be dealt with	...	...	1
			—
			44
			—

In addition to the foregoing, 4 defectives whose cases were reconsidered during the year were sent to Certified Institutions under Order. There were no deaths among

defectives in institutions during the year ; 1 was transferred to a State Institution and 1 was discharged to her home and readmitted to another institution.

The Voluntary Association, in consideration of a financial grant, continued to assist the Council by undertaking supervision of defective persons in their homes, by providing escorts to institutions and assistance in finding places of safety. They also assist in ascertainment, and by reporting to the Statutory Committee when defectives appear subject to be dealt with under the Mental Deficiency Act.

From the commencement of the administration of the Act to the end of the year, 202 persons had been brought to the notice of the Local Control Authority. Of those, 56 have been placed under the supervision of the Voluntary Associations, 85 have been sent to Institutions (78 on petition, 2 under Order of Court, 2 to State Institutions, and 3 under permissive powers), and 3 have been placed under Guardianship. Nine of the defectives thus dealt with have died (7 in Institutions and 2 under supervision), 3 have been discharged from Certified Institutions to their homes, 2 transferred to mental hospitals, and 3 to Institutions for Violent Defectives. At the end of the year, 68 cases were being fully maintained in ordinary Certified Institutions.

Exclusive of those children for whom the Local Education Authorities are responsible, and of defectives for whose care provision has already been made under the Mental Deficiency Act, 203 defective persons had been ascertained from various sources by the end of the year, certain of whom will eventually require institutional care or training. It was estimated by the Committee during the year that about 24 defectives were likely to require institutional care in the near future, and about 42 within the next five years.

Recent experience has emphasised the great difficulty in finding accommodation for urgent cases in institutions.

A special Sub-Committee was appointed to consider the question of institutional provision by the Council, and various premises were reported upon, but no progress was made in that direction. Negotiations were eventually entered into with a view to sharing in a joint scheme provided by several County Authorities for the extension of the Royal Eastern Counties' Institution at Colchester, and the Finance Committee were informed that institutional accommodation was required at once for 10 defectives at Colchester at an estimated cost of £2,500.

## BLIND PERSONS ACT, 1920.

This Act places upon the County Council the duty of promoting the welfare of blind persons within their area. It does not in any way relieve the Education Committee of their responsibility with regard to the training of blind children, adolescents and adults.

In a scattered area such as Cambridgeshire the chief problem is that of promoting the social welfare of the blind in their homes, assisting them to obtain suitable employment, and to dispose of their work. The Council may make the necessary provision through a voluntary agency, and the special sub-committee appointed have, during the current year, conferred with the Cambridge Society for the Blind with a view to formulating a scheme for submission to the Ministry as required by the Act.

The County Council are the registration authority under the Act, and are required to keep full records of all cases.

As a large proportion of the blind are unemployable, it should be widely known that blind persons aged 50 and upwards are entitled to the same pension as that granted at 70 under the Old Age Pensions Acts.



## VITAL STATISTICS AND INCIDENCE OF INFECTIOUS DISEASE.

*Population.*—For the years 1916 to 1919 the Registrar-General furnished two estimates of the population :—(a) for calculation of the death rate, an estimate of the civilian population, and (b) for calculation of the birth rate, an estimate of the total population, including all non-civilians enlisted from the Administrative County, whether serving at home or abroad. In 1920 demobilisation was so far advanced that a single estimate of the population for both births and deaths could be reverted to. The figures furnished by the Registrar-General for this County are as follows :—

*Population.*

County of Cambridge	..	...	...	131236
Cambridge Borough	...	...	...	60154
Aggregate of Rural Districts	...	...	...	71082

*Populations of Individual Rural Districts :—*

Chesterton	...	...	...	...	23356
Caxton and Arrington	...	...	...	...	7077
Linton	...	...	...	...	9429
Melbourn	...	...	...	...	8071
Newmarket	...	...	...	...	20714
Swavesey	...	...	...	...	2435
					71082

*Birth Rate.*—The statistics for 1920 furnished by the Registrar-General are as follows :—

	<i>Registered Births.</i>	<i>Birth Rate per 1000 living.</i>
Administrative County	2717	20.7
Cambridge Borough	1219	20.2
Rural Districts	1498	21.0

The following figures relate to births since 1914, the last year uninfluenced by the War :—

<i>Number of Births.</i>					<i>Birth Rate.</i>		
	<i>Boro.'</i>	<i>Rural.</i>	<i>Total.</i>		<i>Boro.'</i>	<i>Rural.</i>	<i>Total.</i>
1914 ...	996	1393	2389	...	17.4	19.1	18.3
1915 ...	997	1315	2312	...	17.4	18.9	17.7
1916 ...	991	1259	2250	...	17.4	17.5	17.5
1917 ...	741	1010	1751	...	12.7	14.2	13.5
1918 ...	821	1064	1885	...	14.0	14.9	14.5
1919 ...	894	1100	1994	...	14.8	15.4	15.2
1920 ...	1219	1498	2717	...	20.2	21.0	20.7

It will be seen that the fall in the birth rate, both in Cambridge and in the rural area, to the year 1917 was followed by an increase in 1918 and 1919. This increase was greatly accelerated in 1920 after demobilisation, the birth rate in both urban and rural areas of the County considerably exceeding that for 1914. The rates for the Rural Districts, from highest to lowest, were:—Linton, 23.0 (217 births); Newmarket, 21.9 (455); Melbourn, 21.5 (174); Chesterton, 20.4 (478); Swavesey, 18.9 (46); Caxton and Arrington, 18.0 (128).

There were 162 *illegitimate* births in the Administrative County, 63 in Cambridge, 99 in the Rural Districts, compared with 77 in Cambridge, 97 in the Rural Districts, and 174 total in 1919. Calculated as a percentage of total births, the proportion of illegitimate births was 5.1 in Cambridge, 6.6 in the rural area, and 5.9 in the Administrative County, against 8.6, 8.8, and 8.7 per cent. respectively in 1919. There was thus a considerable decrease from 1919 in the proportion of illegitimate to total births in the whole County. This proportion, which fell during the early stages of the War, subsequently rising to a maximum in 1919, fell in 1920 to a figure below that for 1914 (6.3 per cent.). This comparative decrease was in Cambridge, the rural figure being higher than in 1914.

The proportion of *still-births* notified to total births registered was as follows :—

Borough of Cambridge	28	still-births, or	2.3	per cent.
Rural Area	41	„ „	2.7	„
Whole County	69	„ „	2.5	„

These percentages are lower than those of the previous year. They do not accurately state the facts, but they form a useful basis of comparison from year to year.

*Death Rate from all Causes.*—After allowing for deaths away from the usual place of residence, the nett death rate for the whole County was 10.6 per 1,000, against 12.7 in 1919. The rates for the urban and rural areas were 9.4 and 11.7 respectively, both exceptionally low rates. The death rate for Cambridge was 3.1 below that for the Great Towns (12.5); there are again no figures available for rural England and Wales with which the statistics of the rural area of the County may be compared.

The total deaths from all causes in the whole County were 1,401 (Cambridge 570, Rural 831), being 203 less than in 1919, and 404 fewer than in 1918, the year of excessive mortality from influenza. The causes of death which showed large reductions were organic heart disease, influenza and bronchitis. The only item under which serious increase was recorded was congenital debility.

*Infant Mortality.*—The number of deaths under one year, 137 (urban 50, rural 87) was in the proportion of 50 deaths per 1,000 *births*. The corresponding rate for Cambridge was 41, against 85 for the Great Towns, and that for the rural area was 58 per 1,000 *births*. The rate for the Administrative County is an extremely satisfactory one, being 22 deaths per 1,000 *births* lower than the annual average (72) for the preceding 10 years. The rate for Cambridge is the lowest on record, and a lower rate has only once been recorded

during the past 10 years in the rural area, viz., 55 in the year 1917.

After allowing for the increased number of births as compared with 1919, deaths from congenital debility and wasting diseases, which fell appreciably in 1919, regained their former level. There were only 8 deaths in all from the common infectious diseases of infancy, including diarrhoea.

The mortality among illegitimate infants, compared with that among legitimate infants, is shown by the following statement of deaths (approximate) per 1,000 births :—

		<i>Legitimate.</i>	<i>Illegitimate.</i>
Cambridge Borough	...	40	63
Rural Districts	...	55	101
Whole County	...	48	86

It will thus be seen that the death rate among illegitimate infants considerably exceeded that of the legitimate. The actual numbers of deaths of illegitimate infants were 4 in Cambridge Borough and 10 in the Rural Districts.

*Infectious Diseases.*—The record of mortality from infectious diseases is on the whole satisfactory. Deaths from diphtheria and scarlet fever were fewer than in 1919, while mortality from measles and whooping cough was somewhat higher. There were again no deaths from enteric fever, and few from diarrhoeal diseases. The decline in the tuberculosis mortality continued.

*Small-pox.*—No case of small-pox was notified as having occurred in the Administrative County. Dr. Armistead estimates that about half the children born in the Linton and Newmarket Rural Districts in recent years are unvaccinated, while statistics furnished to Dr. Laird by the Vaccination Officer for the Old Borough of Cambridge for the first half of 1920, show that, after excluding those who died

unvaccinated, the proportion of infants successfully vaccinated was only 34.25 per cent.

*Scarlet Fever.*—Notifications numbered 225, compared with 211 in 1919. Of these, 57 were from Cambridge and 168 from the rural area, the greatest prevalence being in Chesterton Rural District, where 92 cases were notified.

There were 2 deaths, both in the rural area, the mortality rate for which was 0.03 per 1,000, that for the whole of the County being 0.01. The proportion of fatal to total cases was 0.9 per cent.

The number of cases removed to Isolation Hospitals was 140, or 62 per cent. of the total notifications. The numbers actually removed in the different Sanitary Districts were as follows:—Cambridge 40 (57 notified), Caxton R.D. 1 (4), Chesterton R.D. 71 (92), Linton R.D. 3 (18), Melbourn R.D. 16 (27), Newmarket R.D. 14 (19), and Swavesey R.D. 8 (8).

In the Chesterton Rural District Dr. Coombes reports that “in 13 parishes, where the cases were notified in the early stages of the disease and consequently prompt action could be taken, the average number of cases per parish was 2.2, as against an average of 15 cases per parish in four parishes where some of the cases were not discovered till they had reached the desquamating stage.”

*Diphtheria.*—The incidence in 1920 showed some reduction on that in 1919, viz., 176 notified cases against 200 in 1919. The greatest prevalence was in Cambridge, where there were 107 notified cases, the rural cases numbering 69. The number of deaths was much reduced, viz., 5 against 15 in 1919, yielding a mortality rate for the whole County of 0.04 per 1,000 living, much below that for England and Wales (0.15). The rate for Cambridge was 0.05, much below 0.16 the rate for Great Towns; while that for the Rural Districts



was still lower, 0.03 per 1,000. The proportion of deaths to total cases was 2.8 per cent.

Removals to Isolation Hospitals numbered 137, or 77 per cent. of the total notifications. The numbers actually removed in the different Sanitary Districts were :—Cambridge 98 (107 cases), Caxton R.D. 5 (5), Chesterton R.D. 11 (16), Linton R.D. 0 (18), Newmarket R.D. 12 (14), Swavesey R.D. 9 (9), and Melbourn R.D. 2 (7). The Chesterton Rural figures for ten years past show a marked improvement, the annual average number of notified cases for the past five years being only 14, compared with 43 for the preceding five years. The value of control of the "carrier" case is also evidenced in this report.

*Enteric Fever.*—The record of this County as regards enteric fever has been very satisfactory for some years past, and this was maintained in 1920. Only 4 civilian cases were notified, the same number as in 1919, and no deaths were recorded. There were no cases notified in Cambridge.

*Erysipelas.*—There were 56 notified cases, against 43 in 1919. There were two deaths, both in Cambridge.

*Puerperal Fever.*—Thirteen cases were notified, 3 in Cambridge and 10 in the rural area. There were 6 deaths recorded, all in the rural area, yielding the somewhat high mortality rates of 0.04 per 1,000 for that area, and 0.08 for the whole County. Apart from puerperal fever, 5 deaths were attributed to child-birth.

*Diarrhoeal Diseases.*—The deaths from this cause among children under two years fluctuates with the temperature and rainfall experienced in the third quarter of the year. In 1920, the number of deaths recorded was as low as 4, compared with an average of 15.5 during the previous ten years; 3 deaths occurred in Cambridge and 1 in the rural area. The death rates per 1,000 births were 1.57 for the

whole County (England and Wales 8.3), 2.46 for Cambridge (Great Towns 10.4), and only 0.66 for the rural area. The local rates therefore are very much below those for the country generally.

*Whooping Cough.*—This disease, from which there were 7 deaths in 1919, was recorded to have caused 10 deaths in 1920, all of which occurred in the Rural Districts. The mortality rates were 0.08 for the Administrative County (England and Wales 0.11), and 0.14 for the rural area.

*Measles.*—The outbreak of measles which commenced in 1919 continued to spread during the earlier part of 1920, and occasioned the closure of many rural schools. As it is no longer notifiable to the Local Sanitary Authority, the notifications by Head Teachers of the Public Elementary Schools are the chief source of information as to prevalence. Nine deaths occurred, 2 in Cambridge and 7 in the rural area. The mortality rates per 1,000 living were 0.07 for the whole County (England and Wales 0.19), 0.03 for Cambridge (Great Towns 0.22), and 0.10 for the Rural Districts.

A large number of visits were paid to the homes by Health Visitors for advisory purposes, and in Cambridge 14 cases were admitted to the Isolation Hospital.

*Acute Poliomyelitis.* (Infantile Paralysis).—There were no notifications and no deaths recorded during the year.

*Cerebro-Spinal Meningitis.*—Five notifications were received, 2 from Cambridge and 1 each from three Rural Districts. In both of the Cambridge cases the infection was contracted elsewhere, and both proved fatal. Of the 3 rural notifications, 2 proved definitely to be due to other infections (tubercular and pneumo-coccal), and the subsequent course of the third case threw doubt on the accuracy of the notification.

Consultant opinion and serum treatment are provided by the County Council when desired by the doctor in attendance.

*Encephalitis Lethargica.*—Nine notifications were received, 7 from Cambridge and 2 from Chesterton Rural District. Five deaths were recorded in all, 2 in Cambridge and 3 in the Rural Districts, yielding mortality rates of 0.04, 0.03, and 0.04 per 1,000 for the Administrative County, Cambridge, and the Rural Districts respectively.

*Malaria.*—Seven notifications were received from Cambridge and 10 from four rural districts, making a total of 17 for the whole County. With the exception of one case, regarding which there is no special note, infection is said in all cases to have been contracted abroad. No deaths are recorded.

*Dysentery.*—There were 6 notified cases, 4 from Cambridge and 2 from the Rural Districts. There is no special comment made.

*Ophthalmia Neonatorum.*—Sixteen notifications were received, 9 from Cambridge and 7 from the rural area, against a total of 23 in 1919. There is no special comment in the local reports, but all cases enquired into under the Midwives Act proved to be slight in degree.

*Pulmonary Tuberculosis.*—The total number of notifications received (Form A) was 241, or 1.83 per 1,000 of the population, compared with 207 (1.64 per 1,000) in 1919. After deducting duplicates, the number of notifications received for the first time was 233, or 1.77 per 1,000, against 202 (1.60 per 1,000) in 1919.

The improvement in notification recorded last year therefore continues. Application by insured persons to the Insurance Committee for institutional treatment of tuberculosis having ceased now that sanatorium benefit is no

longer administered by that Authority, it is of special importance that the statutory requirement to notify should be fully complied with by medical practitioners. By this means the Tuberculosis Officer will have early knowledge of cases requiring sanatorium treatment, provision for which is made by the County Council for both insured and uninsured.

The number of deaths registered from this cause was 88, against 95 in 1919. The decrease in mortality occurred in the rural area. In Cambridge Borough there were 45 deaths, compared with 36 in 1919, the number of deaths registered in the rural area being 43, compared with 59 in the previous year. The mortality rates per 1,000 living were :—Administrative County 0.67 (0.75 in 1919), Cambridge Borough 0.74 (0.62 in 1919), and Rural Districts 0.60 (0.86 in 1919)

Comparison of the number of deaths (95) during the year with the average of 112 for the five years 1910-14, and of 135 for the four War years ending 1918, shows that the downward trend of mortality from this disease which was interrupted by the War has now been resumed

*Tuberculosis of Other Organs*—There were 58 notifications received, compared with 68 in 1919, yielding a notification rate of 0.44 per 1,000. After deducting one duplicate notification, the number of notifications received for the first time was 57, yielding a notification rate of 0.43 per 1,000 of the population. The deaths numbered 19 compared with 28 in 1919. Of these, 7 occurred in Cambridge and 12 in the Rural Districts. The mortality rates per 1,000 living were as follows :—Administrative County 0.14 (0.22 in 1919), Cambridge 0.11 (0.31 in 1919), and Rural Districts 0.16 (0.14 in 1919).

*Pneumonia*.—Deaths recorded as due to this cause numbered 57, compared with 64 in 1919, of which 24 belong to Cambridge and 33 to the Rural Districts. The mortality

rate for Cambridge was 0.39 per 1,000 living, for the rural area 0.46, and for the whole County 0.43 per 1,000.

Acute primary pneumonia and acute influenzal pneumonia became notifiable on March 1st, 1919. During 1920, 22 notifications were received in Cambridge and 20 in the rural area.

*Cancer*.—There were 181 deaths attributed to cancer, against 195 in 1919. Of these 81 occurred in Cambridge and 100 in the rural area. The proportion of recorded deaths per 1,000 living was 1.37 in the Administrative County (1.54 in 1919), 1.34 in Cambridge (1.43 in 1919), and 1.40 in the rural area (1.63 in 1919). The corresponding crude rate for England and Wales for 1919, the latest year for which information is obtainable, was 1.14 per 1,000 living.

The proportion of the population recorded as dying from this cause, which increased steadily over a considerable period up to 1915, remained practically stationary from 1910 to 1917, and showed an appreciable decline in 1918 and 1919, which was maintained in 1920.

*Influenza*.—Following upon the epidemic of 1918-1919 the deaths recorded from this disease fell to 14, of which 6 were in Cambridge and 8 in the rural area. These numbers are much below the average of non-epidemic years. The mortality rates were 0.10 per 1,000 for the whole County, 0.10 for Cambridge, and 0.11 for the rural area.

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